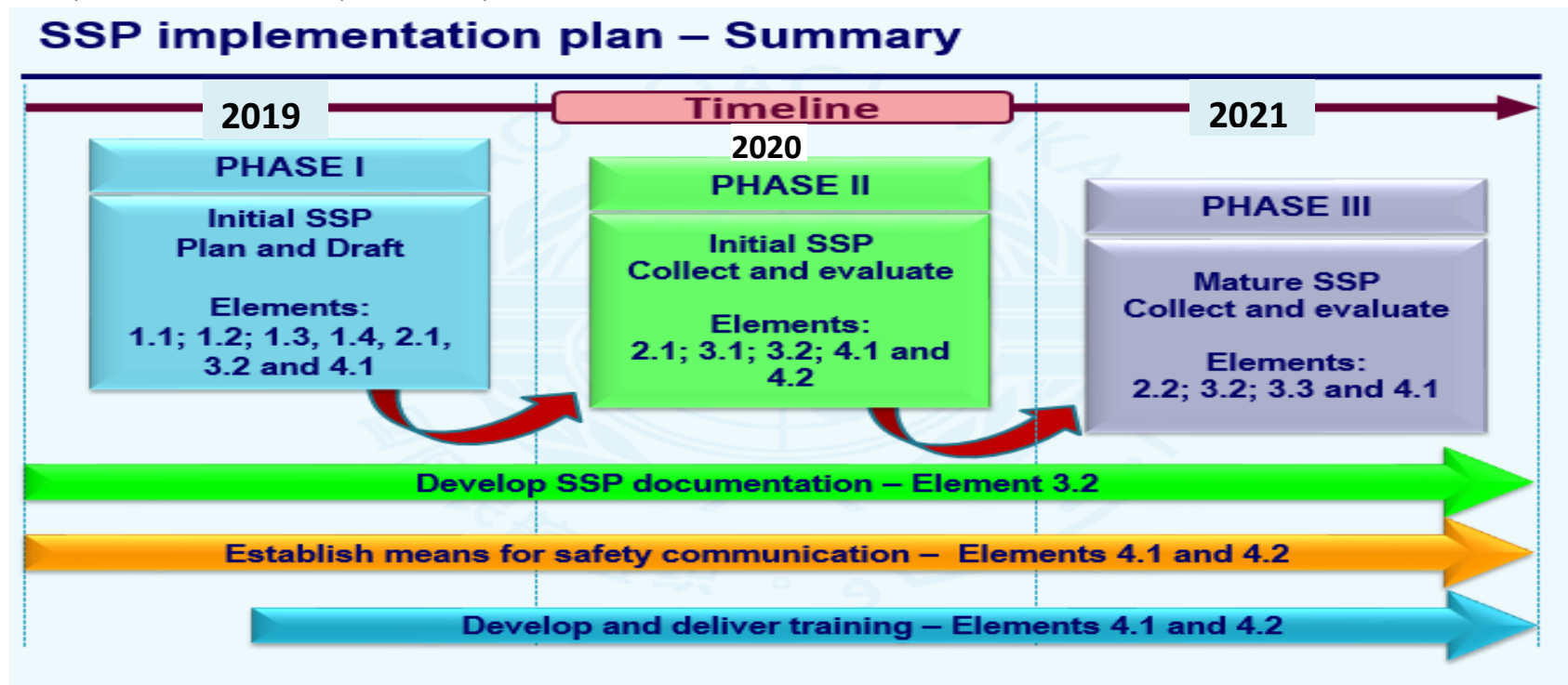**Civil Aviation Authority of Nepal**

State Safety Programme (SSP) Implementation Plan

Nepal shall effectively implement SSP by 2021, a year ahead of requirement of Nepal Aviation Safety Plan. The Phase wise implementation plan with timeframe is as follows:

- First phase of SSP shall be implemented by 2019
- Second phase of SSP shall be implemented by 2020
- Third phase of SSP shall be implemented by 2021

SSP implementation plan – Summary

2019 — Timeline — 2021

2020

PHASE I

Initial SSP
Plan and Draft

Elements:
1.1; 1.2; 1.3, 1.4, 2.1,
3.2 and 4.1

PHASE II

Initial SSP
Collect and evaluate

Elements:
2.1; 3.1; 3.2; 4.1 and
4.2

PHASE III

Mature SSP
Collect and evaluate

Elements:
2.2; 3.2; 3.3 and 4.1

Develop SSP documentation – Element 3.2

Establish means for safety communication – Elements 4.1 and 4.2

Develop and deliver training – Elements 4.1 and 4.2

1. Phase I Implementation Plan:

In this phase, the legislative requirement, other initial frameworks and the initial plan and draft of SSP implementation shall be ensured. Focus shall be given for the establishment of SSP foundation.

Phase I implementation plan shall ensure the following actions:

- Identification of Accountable Executive
- Development and promulgation of Nepal Aviation Safety Plan
- Assignment of Safety responsibilities and accountabilities
- Establishment of SSP implementation Team
- Establishment of High level Safety coordination mechanism
- Performance of GAP analysis
- Revision of SSP Nepal.
- Development of SMS guidance Materials.
- Establishment of Safety database.

S.No.	Element	Milestones	Deliverables
1	1.2	Identify the Accountable Executive for the SSP	• Accountable Executive of SSP has been identified. Director General of Civil Aviation Authority of Nepal is the Accountable Executive of SSP Nepal.
2	1.2	Establish a national-level group to develop the SSP implementation plan and ensure the coordinated participation of other related organizations to the SSP	• SSP implementation team has been established. • A high level safety coordination committee has been formed to ensure the coordinated participation of other related organizations to the SSP
3	1.2, 4.1	Develop, implement and communicate a State safety policy Statement.	• State Safety Policy Statement has been developed and promulgated.
4	1.2, 3.2	Identify, define and document the requirements, responsibilities and accountabilities regarding the establishment and maintenance of the SSP	• State Safety Programme 2011 has been developed and shall be updated according to the ICAO Doc. 9859 3rd edition and Annex 19 first amendment by 2019.

S.No.	Elements (ICAO Doc.9859)	Milestones	Deliverables
5	1.1	Development of Procedure Manual of Safety Management functions.	• SSP implementation team will complete this action
6	1.3	Develop and establish the mechanisms to ensure an independent accident and incident investigation process	• Action will be initiated through High Level Safety Coordination committee.
7	4.1	Develop initial training materials and programme about SSP and SMS concepts for all staff.	• Initial training materials and programme will be developed by Safety Management Division (SMD) in coordination with Human Resource Department (HRD).
8	4.1	Develop a training programme on key components of an SSP and SMS for the staff members according to their involvement within the SSP.	• Training programme will be developed Safety Management Division (SMD) in coordination with Human Resource Department (HRD).
9	1.4	Develop and promulgate an enforcement policy for service providers operating under an SMS environment	• Enforcement policy for service providers operating SMS environment has been developed and promulgated and will be updated as required.
10	2.1	Establish a timeframe to periodically review the requirements and specific operating regulations	• Timeframe has been established and periodically reviewed.
11	3.2	Develop and establish the State safety library	• Basic safety database has been maintained by Safety Management Division and will be upgraded to enhance capacity.

S.No.	Elements (ICAO Doc.9859)	Milestones	Deliverables
12.	4.1	Establish means to communicate the safety related information internally and externally	• High Level Safety Coordination Committee has been established for the high level coordination regarding the safety issues. • For effective communication with safety oversight departments, focal points have been established. • National Aviation Safety Team (NAST) will be reformed including safety managers from service providers for effective safety communication by 2018.
13.	1.2	Develop SSP to describe how the components and elements of the SSP prescribed in SMM are implemented in Nepal (SSP procedures to be effective and compliant with ICAO provisions).	• SSP-Nepal has been developed. • It will be updated in accordance to the 1st amendment of Annex 19 by 2019.
14.	1.2	Perform the GAP as prescribed by ICAO Doc. 9859 (SMM)	• GAP analysis has been performed and deficiencies identified.

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2. Phase II Implementation Plan:

This phase shall ensure the initial level of SSP implementation with focus on collection of Safety data/information and management of safety risk.

Phase II implementation plan shall ensures the following actions:

- Selection of Initial State safety indicators, Targets and ALoSP.
- Establishment of Mandatory and Confidential reporting systems.
- Acceptance on service providers SMS.
- Safety Inspections, audits, surveys etc.

S.No.	Elements (ICAO Doc. 9859)	Milestones	Deliverables
1	3.2	Initial Selection of State Performance Indicators, Targets and ALoSP.	• CAA shall collect analyzed and consolidated safety information from all service providers at the end of each year. • The safety data/information provided by service providers and safety data/information received directly by Authority shall be analyzed and the initial State safety performance indicators, targets and ALoSP shall be developed. • The initial Safety Performance Indicators, Targets and ALoSP shall be based on high consequence data of 2018 and 2019. • This milestone shall be implemented by the first quarter of 2020 by Civil Aviation Safety Regulation Directorate.

S.No.	Elements (ICAO Doc.9859)	Milestones	Deliverables
2	3-2	Develop and establish a State mandatory and confidential hazard reporting system	• CAA has developed and promulgated Directive No. CASRD 01/2016, 'Safety Occurrence Reporting Procedures' in Mandatory occurrence reporting. • CAA has provisioned Voluntary Reporting System in website with facility of de-identification of reporter for the purpose of continuous reporting. • CAA has provisioned an incident reporting facility in website for incident reporting related to ATS. • CAA has developed an email nast@caanepal.gov.np for safety reporting of any nature. • CAA shall start working with computerized system by 2020 for safety management which shall have avenues for CAA offices, services providers and other aviation stakeholders for direct safety reporting.
3	3-2	Develop and establish a State hazard database	• CAA shall start working in a software (database) for safety data repository, collection and analysis for effective safety management by 2020. • Database shall be centrally operated by Safety Management Division, CAAN.
4	4-1	Develop training material to staff as appropriate in hazard identification and risk management	Training program on Hazard Identification and Risk Management (HIRM) shall be developed by Safety Management Division in coordination with Human Resource Department by 2020.

S.No.	Elements (ICAO Doc.9859)	Milestones	Deliverables
5	3.1	Develop the mechanisms to ensure that regulatory safety risk controls are appropriately integrated into the service providers' SMS	• CAA has developed and promulgated NCAR ……..with criteria of acceptance of service providers' SMS. • Flight Safety Standards Department (FSSD), Aerodrome Safety Standards Department (ASSD) and Air Navigation Services Safety Standards Department (ANSSSD) are accepting service providers' SMS manuals operating under their purviews on the basis of regulatory requirements. • Civil Aviation Safety Regulation Directorate shall develop and promulgate an SMS implementation Guidance for service providers to help them for an effective, standard and uniform implementation of SMS by 2020. • SMS audit is being conducted to confirm the performance of Service Providers' SMS with regulatory requirements.
6	2.2	Establish a timeframe in consultation with service providers related to the phased approach of their SMS.	• NASTs meetings are being held periodically for discussion about SMS implementation in service providers. • In the meetings, phases of implementation with timeframe are intensively discussed and ideas, information and experiences are exchanged to help each other for effective phased implementation of SMS.
7	3.1	Develop the mechanisms to monitor that service provider's hazard identification and safety risk management processes follow established regulatory requirements	• Flight Safety Standards Department (FSSD), Aerodrome Safety Standards Department (ASSD) and Air Navigation Services Safety Standards Department (ANSSSD) are accepting service providers' SMS manuals operating under their purviews on the basis of regulatory requirements. • SMS audit is being conducted to confirm the hazard identification and safety risk management processes of service providers' SMS follow established regulatory requirements

S.No.	Elements (ICAO Doc.9859)	Milestones	Deliverables
8	3.2	Develop mechanisms to exchange safety information with service providers and/or other States as appropriate	• CAA has formed NAST-Aeroplane, NAST-Rotors, NAST-ANS and NAST-aerodrome for collaboration of effective SMS performance including exchange of safety data and information between services providers and CAA. • CAA is working with regional group such as RSOO, RASG for technical support for State Safety Management and exchange of safety information with other states. • CAA shall exchange safety information through ICAO safety website and programmes by 2020.
9	4.2	Develop and establish the means of communication to support SMS implementation among service providers, including small operators.	• CAA has formed NAST teams for effective implementation of SSP and SMS. NAST teams are composed of services providers' Safety Mangers and CAA Safety personnel so that safety data and information could be exchanged freely and effectively. • Safety data and information is being communicated through nast@caanepal.gov.np which is being handled by Safety Management Division. • CAA will require to all service providers to work on same or compatible computerized safety management system which will facilitate for safety data/information exchange between CAA and service providers and between service providers by 2020.
10	4.2	Establish and communicate initial ALoSP	Safety Management Division shall establish initial ALoSP by first quarter of 2020 and communicate to all service providers to have a harmonized safety management in the nation's aviation system.

3. Phase III Implementation Plan:

In this phase, the matured SSP shall be ensured for effective Safety Management in Nepal. This phase shall ensure the effective safety data/information collection and Risk Management.

Phase III implementation plan shall ensures the following actions:

- State safety data collection and analysis capabilities
- Agreement on safety performance indicators
- ALoSP with safety measurement and safety performance measurement

S.No.	Element (ICAO Doc. 9859)	Milestones	Deliverables
1	2.2	Develop and implement a procedure for the agreement on safety performance of individual service providers' SMS	- CAA shall develop mature state's safety performance indicators and targets covering all areas of operation and communicate to all service providers by first quarter of 2021. - CAA shall develop and implement a procedure for agreement on performance of service providers' SMS by 2021.
2	3-2	Establish means to develop safety data collection capabilities on both high and low consequence outcomes	- Safety data collection and analysis capabilities shall be further strengthened by safety seminars/workshops and formal training. - Safety data analysis shall be more comprehensive with identification of High and low consequence of safety data. - AT the end of each year trend analysis of high and low consequence safety data shall be developed and future safety goals, objectives, indicators and targets are revised if required.

S.No.	Element (ICAO Doc. 9859)	Milestones	Deliverables
3	3-2	Establish means to collect information on hazards at an aggregate State level as well as at individual service provider level	• With the help of computerized safety management process, collected hazards from all service providers and other sources shall be centrally aggregated and analyzed. • All service providers shall establish their own separate hazard database and report to CAA periodically for data aggregation and maintenance of state safety database. • CAA shall compare the service providers' safety performance with centrally analyzed performance indicators and targets and difference, if any is identified, shall be communicated with respective service provider. • Safety Management Division shall perform state safety data collection and analysis and communicate with service providers through their safety managers regarding all safety management activities and issues. • These mechanisms and processes shall be developed and implemented by 2021.
4	3-2	Implement mechanisms to exchange safety information with service providers and/or other States as appropriate	• CAA has formed NAST-Aeroplane, NAST-Rotors, NAST-ANS and NAST-aerodrome for collaboration of effective SMS performance including exchange of safety data and information between services providers and CAA. • CAA is working with regional group such as RSOO, RASG for technical support for State Safety Management and exchange of safety information with other states. • CAA shall exchange safety information through ICAO safety website and programmes by 2020. • These mechanisms to exchange safety information will be fully implemented by 2021.

5	2-2	First round of agreements upon safety performance indicators and targets for various service providers' SMS	• The first round of agreement upon safety performance indicators and targets for various service providers' SMS with state's performance indicators and targets established in 2020 shall be reached by the first quarter of 2021.
6	3-3	Establish procedures to prioritize inspections, audits and surveys, based on analysis of hazards and safety risks	• Safety audit of service providers for performance of SMS will be continued in scheduled basis. • Safety assessment of service providers shall be performed any time if any doubt exist to CAA for service providers' safety management or any evidence shows that safety level has degraded. • Normally after any accident, serious incident or continued safety lapses in any service provider, CAA shall conduct safety audit of the organization in priority basis to ensure the required level of safety is maintained in all areas of operation. • Civil Aviation Safety Regulation Directorate shall develop a separate surveillance procedure which will include, inter alia, scheduled inspections, audits and surveys of service providers in normal conditions and random inspections, audits and surveys based on analysis of hazards and safety risks by 2021.
7	4-1, 4-2	Establish and communicate mature ALoSP	CAA shall establish mature State safety performance indicators and targets covering all areas of operation of civil aviation, establish State ALoSP, communicate with service providers and reach to an initial level of second round of agreement upon safety performance indicators and targets for various service providers' SMS by the end of 2021.

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